STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
TRAFFIC OPERATIONS DIVISION
SUITE 1800, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 253-1122

CLAY BRIGHT
COMMISSIONER

BILL LEE
GOVERNOR

TO: Will Reid
Assistant Chief Engineer of Operations

FROM: Brad Freeze, Director of Traffic Operations

SUBJECT: **Proprietary Item Request and Justification**
City of Cookeville

1) **Traffic Signal Controllers and Malfunction Management Units (MMU)**
2) **Traffic Signal Network Switches**
3) **Traffic Signal Standalone Quadrupole Loop Detectors**
4) **Traffic Signal Emergency Vehicle Preemption Equipment**

1) **Traffic Signal Controllers and Malfunction Management Units (MMU):** The City of Cookeville is requesting that Siemens controllers and the Eberle Design, Inc. (EDI) Malfunction Management Units (MMU) be used in all signalization projects within the City over the next three years where Federal and/or State funding are used. The following are justification items for this request:

   The City of Cookeville currently operates and maintains Siemens controllers and EDI MMUs at all 76 signalized intersections within the City's jurisdiction. The City of Cookeville staff has been extensively trained to install, operate, maintain, program, and troubleshoot Siemens controllers. This allows our technicians to quickly diagnose problems with field units which reduces the time required to maintain the system overall and helps keep the system operational during heavy traffic times to insure maximum capacity of the synchronized system. By utilizing Siemens controllers and EDI MMUs as the standard for the City, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repair.

2) **Traffic Signal Network Switches:** The City of Cookeville is requesting that Siemens network switches be used in all signalization projects within the City over the next three years where Federal and/or State funding are used. The following are justification items for this request:

   The City of Cookeville currently operates and maintains Siemens network switches at all 76 signalized intersections within the City's jurisdiction. The City of Cookeville staff has been extensively trained to install, operate, maintain, and troubleshoot Siemens network switches. This allows our technicians to quickly diagnose problems with field units which reduces the time required to maintain the system overall and helps keep the system operational during heavy traffic times to insure maximum capacity of the synchronized system. By utilizing the Siemens network switches as the standard for the City, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repair.

3) **Traffic Signal Standalone Quadrupole Loop Detectors:** The City of Cookeville is requesting that Eberle Design, Inc. (EDI) Standalone Quadrupole Loop Detectors be used in all signalization projects within the City over the next three years where Federal and/or State funding are used. The following are justification items for this request:

   The City of Cookeville currently operates and maintains EDI Standalone Quadrupole Loop Detectors at all 76 signalized intersections within the City's jurisdiction. The City of Cookeville staff has been extensively trained to install, maintain, and troubleshoot EDI Standalone Quadrupole Loop Detectors. This allows our technicians to quickly diagnose problems with field units which reduces the time required to maintain the system overall and helps keep the system operational during heavy traffic times to insure maximum capacity of the synchronized system. By utilizing the EDI Standalone Quadrupole Loop Detectors as the standard for the City, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repair.

4) **Traffic Signal Emergency Vehicle Preemption Equipment:** The City of Cookeville is requesting that Tomar Strobecom emergency vehicle preemption equipment be used in all signalization projects within the City over the next three years where Federal and/or State funding are used. The following are justification items for this request:

   The City of Cookeville currently operates and maintains Tomar Strobecom emergency vehicle preemption equipment at 46 signalized intersections within the City's jurisdiction. The desire of the City is to increase the efficiency of signal system while providing quicker movement of the emergency vehicle through the system when needed. The City of Cookeville staff has been extensively trained to install, operate, maintain, and troubleshoot Tomar Strobecom emergency vehicle preemption equipment. This allows our technicians to quickly diagnose problems with field units which reduces the time required to maintain the system overall and helps keep the system operational during heavy traffic times to insure maximum capacity of the synchronized system. By utilizing this emergency vehicle preemption detection system as the standard for the City, there will be a cost savings in stocking replacement equipment and will result in faster and less costly repair.

I, Brad Freeze, Director of the Traffic Operations Division of the Tennessee Department of Transportation, do hereby certify that in accordance with the requirements of 23 CFR 635.411(a) (2) that the patented or proprietary items listed above are essential for the synchronization of existing facilities.

Assistant Chief Engineer of Operations

8/16/19
Date

CITY OF COOKEVILLE TENNESSEE

Department of Public Works

1115 East Spring Street
Cookeville, TN 38501
Phone: 931-520-5249 Fax: 931-520-0629

July 16, 2019

Mr. Steve Bryan, P.E.
Traffic Operations Division, Traffic Engineer
Tennessee Department of Transportation
James K. Polk Bldg., 12th Floor
505 Deaderick Street
Nashville, TN 37243-0348

Re: Request for Proprietary Traffic Signalization Components Certification

Mr. Bryan:

The City of Cookeville is requesting certification to specify the following items to be used as part of any signalization project in the City of Cookeville that uses state or federal funds:

Siemens network switches
Siemens controllers

EDI conflict monitors
EDI standalone quadrupole loop detectors
Tomar Strobecom emergency preemption

The use of Siemens equipment is for full synchronization capabilities. There are currently 76 signalized intersections located in Cookeville. Our existing inventory is composed of entirely Siemens controllers and components. All of our traffic signal technicians have undergone extensive training for this system as well as keep spare parts in inventory. By using these devices throughout the City of Cookeville there will be a cost savings in stocking replacement equipment as well as faster and less costly repair or replacement.

EDI conflict monitors and quadrupole loops detectors are used at all of our signalized intersections. Our traffic technicians have undergone training for the use and installation of these monitors and loops as well as keep spare parts in inventory. By using these

devices throughout the City of Cookeville there will be a cost savings in stocking replacement equipment as well as faster and less costly repair or replacement.

Cookeville currently has 46 signalized intersections that are equipped with emergency preemption. All are Tomar Strobecom. All of our traffic signal technicians have undergone extensive training for this system as well as keep spare parts in inventory. By using these devices throughout the City of Cookeville there will be a cost savings in stocking replacement equipment as well as faster and less costly repair or replacement.

If you have any questions concerning this, please contact me.

Sincerely,

Greg Brown

Greg Brown, P.E.
Public Works Director
City of Cookeville
931-520-5247